

History and Theory

Frank Lloyd Wright- FallingWater

First constructed in 1937, Fallingwater was a multipurpose house mainly used as a weekend break from a busy life. Built near a city of Pittsburg, USA, named after the magnificent waterfall that is combined into its construction. The architect responsible for this elegant piece was Frank Lloyd Wright, making fallingwater one of the most famous and popular in his lifetime for organic architecture. This project was built and made for Edgar Kaufmann and his family which

they occupied until 1963 when it was later passed down to his son and put into the Western Pennsylvania conservancy, which maintained and preserved it.

When visiting and site planning, Frank L. Wright was given a set of requirements, one of them being to have this house incorporated with the waterfall as the client had that bond with it and the calmness and relaxation associated with the water flowing down the rocks.

Knowing the criteria from the clients wishlist, Frank L. Wright came up and decided upon an idea that would not only put him down in the books but also revolutionized the principles of building. He wanted to integrate the building and have it directly above the waterfall. Creating a bond between the building and the water as the client wished, making an integration of human lifestyle with the peaceful nature **(Anon, 2017)**. Interpreting a bit of Japanese culture and style into the

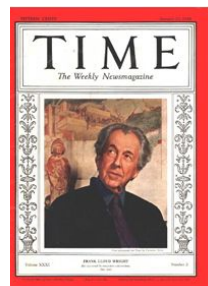
windows aligned alongside the terraces, to make the red paint stand out from the house, giving it that unique look.

Fallingwater is a three level construction that sits on a rock which is hung over the waterfall. The most interesting part of the house is the terraces that make the allusion of the floating over the waterfall below. The way he made that happen is they are anchored to the houses' stone chimney using cantilevers, the other two floors were extended horizontally. According to Frank L. Wright the central fireplace was the focal point of the house. The circulation of the building was intended to have the sense of compression when indoors and an open expanse as you are walking out of the building. The huge windows made on the terrace were made to take in the natural light and sunlight into the house, also making it a lot easier and nicer for the sound of the water to come through into the building to create a harmonic atmosphere inside. His attention to detail made it easier to add all the unique features all around. The windows that were stretched vertically along all of the floors clearly show the different levels and let the nature around in the forest come through, allowing it to integrate it as much as possible together.

The north facing side of the building is very interesting and also known as the 'forest of the house' which are made of two pergolas which go along the exterior walls to one of the stone inclines and hang over the path which then leads to the entrance of the house. The pergolas used in this design were carefully arched around the trees nearer the building which clearly show the respect for nature surrounding this house **(Zelazko A.,nd)**.



Figure 1-(Google maps screenshot)



(Time magazine,1938)



Figure 2&3- (Higgins C. 2014)



Figure 4-(My own sketch)

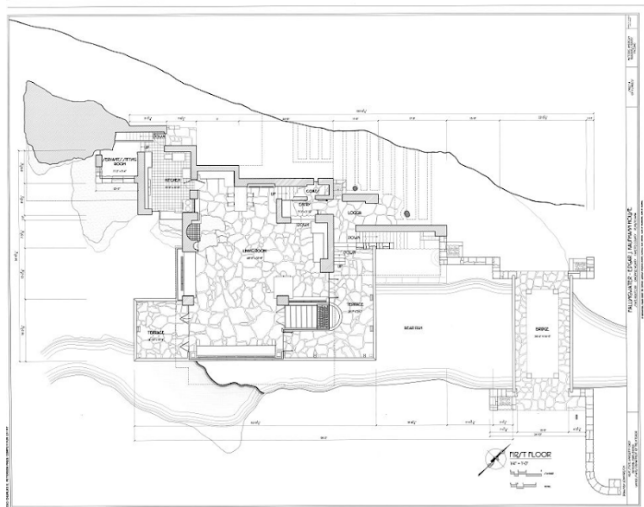


Figure 5-(Steward T. nd)

its time. Frank L. Wright created a modernist building with a natural aesthetics to suit the nature part around it. He extracted rocks locally which formed the mansanory of the bottom half of the house facade to create an effect of having the natural from the floor, making a gradient change and and cleverly including the movement of the natural sources from the ground up, gradually moving to using concrete on the upper parts of the house using a very organic material. Also largely using steel within its reinforcement and also in the frames of the windows.

The most interesting parts of the house are the complicated designs of the terraces that are caterleaving over the waterfall and all around the house, perfectly positioned to take huge advantage of the moving sun by carefully examining the rise and fall of the sun making a chilled out atmosphere inside throughout the day with a light glow after dusk. (Anon, 2007)

The key parts not so noticeable in the inside of the house that were engineered and cleverly thought of by Frank L. Wright is the design of the furniture and space inside to purposely echo the house. For example all of the sofa's were made to be cantilevered from the walls with all the chairs and tables having edges that extended like balconies.

He purposely chose very simplistic colours not to only compliment the forest around it but using the warm colours inspired by the American southwest, the only two colours used were light ochre for the concrete and his signature colour red being used a lot in the steel frames of the windows all around the house. He always aimed to create a unified composition to limit the colour palette, working with newly advanced eco-friendly paints that withstand the environmental difficulties within that site. (Guagliardo M., 2015).

The overall price for the building was around £125,600 and has since opening the doors for visitors in 1964 had over 4.5 million people visited, showing the immense interest in this world wide known building.

Underpinning Frank L. Wright's design was his belief that nature was at most sacred. Inspiring himself with a lot of Japanese art and architecture, focusing on their spiritual sense, harmony and the simplistic designs, explaining his ideology "to help people understand how to make life more beautiful, the world a better one for living in, and to give reason and meaning to life". (Frank L. Wright, nd) Signifying perfect unity and a natural way of living in this world. (Silzer K., 2019)

His thought process was so beyond his time by creating such an unthinkable piece of architecture, at that time a lot of people around him thought that what he sought to make was impossible or a thought in his fantasy, when not only did he back it up with revolutionary techniques but made it a reality and proving everyone that it is possible to do.

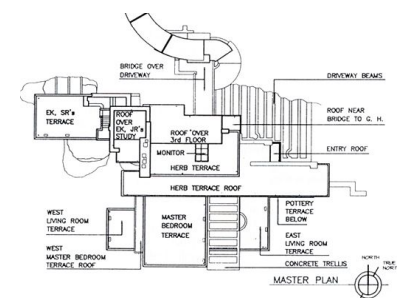


Figure 6- (Anon, nd)

section

There are many architects that have made amazing architecture around the world but nothing as impressive and revolutionary as Frank Lloyd Wright's Fallingwater. His attention to detail and the success of involving nature within his design has made an immense progress of the way architects build nowadays through his innovative way of creating his work. Clearly demonstrating Frank Wright's genius yet daring way of thinking and designing, in a way that hasn't yet been thought of at that time. Hence revolutionising this building making it look like it was built much earlier than it actually did. He has definitely made it his life goal to create the perfect balance between humans' need and desire with the balance of nature within the structures he designs. *"Recognized as one of the clearest successes of the American genius, Frank Lloyd Wright...It's beauty remains fresh like that of the nature into which it fits. It has served well as a home, yet has always been more than that: a work of art, beyond any measures of excellence. Itself an ever-flowing source of exhilaration, it is set on the waterfall of Bear Run, spouting nature's endless energy and grace."* (Kaufmann E. 1965). Not only appreciating the effort he puts into creating the relationship between the building and the space around it but also acknowledging his strong ideas of what he considered as organic and actually putting these principles into his work and obeying them, with the strong connection to his favourite Japanese art and style and the incorporation of that within his architecture pieces.

References/Bibliography:

Figure 1 - Google map, screenshot, fallingwater, location,

<https://www.google.com/maps/place/Falling+Waters,+WV+25419,+USA/@39.5689523,-77.915646,12.92z/data=!4m8!1m2!2m1!1sfalling+water+maps!3m4!1s0x89c9f64246d5bc99:0x1b9acbdba80a16052!8m2!3d39.5633532!4d-77.8930664> . [accessed, 17:30 pm 16/04/2020].

Figure 2&3- Higgins C. 2014 , 3D Frank Lloyd's "fallingwater", MF,

<https://www.mentalfloss.com/article/58044/3d-tour-frank-lloyd-wrights-fallingwater> . [accessed, 16:00 pm, 16/04/2020].

-Times Magazine cover, 1938, <https://fallingwater.org/media-resources/fallingwater-facts/> [accessed, 16:20pm 16/04/2020].

-Figure 4- Viktoria V. 2020 , illustration, own sketch.

- Anon, 2017, Fallingwater, falling water facts, <https://fallingwater.org/media-resources/fallingwater-facts/> . [accessed, 18:00, 16/04/2020].

-Zelazko A., nd, Fallingwater, encyclopedia britannica, <https://www.britannica.com/topic/World-Heritage-site> . [accessed, 19:00, 16/04/2020].

-Anon, 2007, Fallingwater house, Arquitectura, <https://en.wikiarquitectura.com/building/fallingwater-house/> . [accessed, 15:00, 17/04/2020].

-Guagliardo M. 2015, Frank lloyd Wright's masterpiece, Fallingwater, mid-century homes, <https://www.midcenturyhome.com/frank-lloyd-wright-fallingwater/> . [accessed, 15:50 ,17/04/2020].

-Silzer K., 2019, Understanding Frank Lloyd Wright through 5 key works, Artsy, <https://www.artsy.net/article/artsy-editorial-understanding-frank-lloyd-wright-5-key-works> . [accessed, 15:30pm 18/04/2020].

- Kaufmann E. ,1965, Bear Run conservation interview, quote, <https://fallingwater.org/history/about-fallingwater/designing-fallingwater/> [accessed, 15:50pm 18/04/2020].

Figure 5- Steward T. nd, First floor plan, <https://www.loc.gov/resource/hhh.pa1690.sheet/?sp=4> .[accessed, 12:30pm, 19/04/2020].

Figure 6- Anon, dn, design of fallingwater, Fallingwater history,

<https://fallingwater.org/history/about-fallingwater/designing-fallingwater/> . [accessed , 13:00pm 19/04/2020].